BY ORDER OF THE SECRETARY OF THE AIR FORCE AIR FORCE INSTRUCTION 11-301, VOLUME 2
30 SEPTEMBER 2003

Flying Operations

MAINTENANCE AND CONFIGURATION REQUIREMENTS FOR AIRCREW AND AIRCRAFT-INSTALLED LIFE SUPPORT EQUIPMENT (LSE)



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: HQ USAF/XOOT

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Supersedes AFI 11-302, Vol 1, 1 October 1999

Certified by: HQ USAF/XOO

(Brig Gen Teresa M. Peterson) Pages: 45

Distribution: F

This volume implements Air Force Policy Directive (AFPD) 11-3, *Life Support*, and Air Force Instruction (AFI) 11-301, Aircrew Life Support Program. This volume prescribes policy and incorporates the intent of AFPD 10-9, Lead Operating Command Weapon Systems Management. It establishes Air Force standards and defines maintenance and configuration requirements for mission design series (MDS) which Headquarters Air Mobility Command (HQ AMC) is the lead command of and maintains configuration control over. It clarifies and standardizes minimum essential quantities of prepositioned life support equipment (LSE) by aircraft type and configuration requirements not otherwise specified for using commands. This publication applies to the Air National Guard (ANG) when published in the ANG IND 2. Refer recommended changes and conflicts between this and other publications through appropriate channels, in accordance with (IAW) AFI 33-360, Volume 1, Publications Management Program, to the Directorate of Operations, Aircrew Operations and Training Division, Aircrew Life Support Branch (HQ AMC/DOTL), 402 Scott Drive, Unit 3A1, Scott AFB IL 62225-5302 on Air Force (AF) Form 847, Recommendation for Change of Publication. Intervening levels will evaluate all recommendations and forward the AF Form 847 to the next echelon. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Records Disposition. Maintain and dispose of all records created as a result of processes prescribed in this publication IAW AFMAN 37-139, Daily Records Disposition Schedule. This instruction is affected by the Paperwork Reduction Act as amended in 1996. This instruction contains references to field (subordinate level) publications and forms which will be converted to departmental-level publications and forms and may be obtained from the respective MAJCOM publications office.

SUMMARY OF REVISIONS

This revision incorporates interim change (IC) 2003-1. This change converts AFI 11-302, Volume 1 to AFI 11-301, Volume 2, re-titles the publication, and transfers the OPR from HQ USAF/XOOP to HQ USAF/XOOT. It rescinds paragraph 3.10.1. through 3.10.6. and provides improved policy for equipping

aeromedical evacuation (AE) crewmembers (AECM) during deployment operations. It establishes a new basis of issue (BOI) for AE crewmembers (Table 11.), joins AE LSE with AE kits (UTC FFQDM) (paragraph 3.10.1.), identifies units to maintain AECM support kits (paragraph 3.10.2.), establishes Civil Reserve Air Fleet (CRAF) support kits (paragraph 3.10.4.), and identifies medical logistics contact information (paragraph 3.10.5. and Table 13.). This change also deletes the requirement for MB-1 casualty life preserver units to be prepositioned aboard aircraft to accommodate patients, C-141 units to maintain 250 passenger (PAX) masks, and C-130 units to maintain 5 passenger oxygen kits (POK) for AE kits. See the last attachment of the publication, IC 2003-1, for the complete IC.

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Section A—OVERVIEW

- **1. General:** This volume specifies minimum LSE to configure C-5, C-9, C-17, C-20, C-21, C-27, C-130, C-141, KC-10, and C/KC-135 aircraft and is to be used in conjunction with other MDS configuration publications and applicable technical orders (T.O.).
 - 1.1. **Supplements.** HQ AMC serves as lead command for this publication, as well as aircraft, aircrew, and passenger aircrew life support (ALS) systems related to these MDSs. Major Commands (MAJCOM) with these types of MDS will supplement this publication to meet their specific mission requirements and identify equipment inspection maintenance and maintenance frequencies, as required IAW AFI 33-360, Volume 1. Due to Air Education and Training Command (AETC), Air Force Materiel Command (AFMC), and Air Force Special Operations Command's (AFSOC) missions, HQ AETC AOS/AOXL, HQ AFMC/DOV, and HQ AFSOC/DOTL will establish requirements to meet mission needs and is authorized to determine unique requirements for assigned aircraft.
 - 1.2. **Waivers.** Units may request waivers to requirements of this instruction when unique or unusual circumstances or requirements affect the unit's ability to implement stated policy or procedure IAW AFI 33-360, Volume 1 (i.e., compliance with this instruction is creating a hazard, an emergency or special circumstance exists or to protect lives, when necessary to comply with Air Force publications, etc.).
 - 1.3. **Communications.** Using organizations will direct all communications concerning this publication through their respective MAJCOM ALS functional manager.
 - 1.4. **Reference Materials.** A glossary of publications and T.O.s, abbreviations and acronyms, and definitions for terms used in this publication are available (see **Attachment 1**).

Section B—ROLES AND RESPONSIBILITIES

2. Responsibilities:

2.1. **Commanders.** Ensure all crewmembers and passengers wear or have access to the appropriate LSE for the route of flight and duration of the mission. Commercially procured items are not authorized for use without prior approval by the respective MAJCOM ALS office of primary responsibility (OPR).

2.2. Aircrew Life Support (ALS) Function:

- 2.2.1. Monitor all active and ongoing modifications and time compliance technical orders.
- 2.2.2. Store, handle, service, and account for items part of the 412A life support system.
- 2.2.3. Ensure all LSE inspections remain current throughout the scheduled mission duration. Ensure aircraft LSE will have a minimum of 60 days remaining on its current repack and inspection when departing home-station for tanker task force operations, integrated tanker unit deployments (ITUD), and 30 days for channel missions, business efforts, aircraft transfers, etc. Transfer aircraft IAW T.O. 00-20-1, *Preventive Maintenance Program General Policy Requirements and Procedures*.
- 2.2.4. Inspect and repack integrated survival vest and body armor, survival kits, inner-and-outer life raft accessory containers, and applicable components. Inspect aircraft-installed ALS oxygen (O2) equipment, parachutes, PCKs, and personnel restraint harnesses.

- 2.2.5. Ensure passenger demonstration equipment is available and prepositioned aboard all passenger-carrying aircraft (refer to paragraph 12.).
- 2.2.6. Preposition a sufficient quantity of towelettes (70 percent isopropyl alcohol) aboard each aircraft for crewmembers to disinfect prepositioned O2 masks.
- 2.2.7. Maintain applicable flight simulator LSE. MAJCOMs will specify frequency and procurement procedures as agreed upon.
- 2.2.8. Permanently preposition LSE to the maximum extent possible at all times to provide mission flexibility, especially when aircraft is away from home-station. This will reduce excessive handling and damage of LSE. Prepare AFTO Form 46, *Prepositioned Life Support Equipment* in duplicate. Maintain a file of the original and completed AFTO Forms 46 by aircraft tail number for all assigned aircraft for historical purposes.
- 2.2.9. ALS is not responsible for storing, handling, servicing, or accountability of the following items: thermos jugs, fire extinguishers, aircraft portable O2 cylinders, pre-breather O2 assemblies, aircraft oxygen regulators, headsets, flak helmets, flak vests, groundcrew chemical defense equipment, pyrotechnic flare pistols, E-and-E kits, passenger service equipment, aircraft escape slides, aircraft first aid kits, aircraft night vision goggle lighting components, rear vision devices, or items not related to the 412A life support system.

Section C—LSE MAINTENANCE AND CONFIGURATION REQUIREMENTS

3. Aircraft-Installed LSE Procedures. LSE must be handled with care to avoid damage to this life sustaining equipment. Prepositioning equipment IAW this publication allows flexibility while the aircraft is away from home-station and standardizes LSE configurations Air Force-wide. The applicable MDS configuration tables within this publication establish minimum equipment requirements. In the event installed LSE comes due while the aircraft is on alert status or away from home-station, place these items on a red dash until the aircraft goes off alert or returns to home-station. When aircraft is removed from alert status or returns to home-station, upgrade to a red X, keeping within the provisions of T.O. 00-20-1.

3.1. **C-5 LSE:**

- 3.1.1. Configure aircraft IAW Multi-Command Instruction (MCI) 11-203, *C-5 Operations--Configuration and Mission Planning* (will convert to AFI 11-2C-5, Volume 3, Addenda A, *Aircraft Configuration*) and T.O. 1C-5A-1, *Flight Manual, USAF Series, C-5A and C-5B Airplanes*. Aircraft commanders (AC) may request additional equipment be positioned aboard aircraft to accommodate aircrew and passenger increases, as required.
- 3.1.2. C-5 units without an airdrop mission will maintain personnel parachutes and LPUs for 25 percent of primary aircraft inventory (PAI) in support of Air Force's "GLOBAL ENGAGEMENT" mission. Not applicable to Altus AFB (AETC), AFMC, and ANG.

Table 1	C_{-5}	IRCRA	FTISE	CONFIGUR	ATION
Table 1.	1 - 1 /		V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 7)	Permanent- Transfer
Mask, 358-series w/goggles	7	7	5	7
Mask, Firefighter, Smoke (see note 1)	14	14	0	14
Mask, AWACS (MBU-12/P or -5/P)	6	6	0	6
Emergency Escape Breathing Device (EEBD)	8	8	5	8
or Protective Breathing Equipment (PBE)				
Mask, Passenger (PAX) Oxygen	101	101	0	101
Emergency PAX Oxygen System (EPOS) (see note 2)	88	88	0	88
Protective Clothing Kit (PCK)	2	2	0	2
Goggle, Flash Blindness, MIL-G-635	8	8	0	8
Harness, Restraint, PCU-17/P	2	2	1	2
Parachute, BA-18M/BA-22 (see note 3)	As Required	As Required	0	0
Life Raft, 25-Person	4	4	0	4
Life Pres, Adult-Child (A/C) or, (see note 4)	100	100	0	100
Life Pres, LPU-5/P (Adult) with,	80	80		80
Life Pres, MD-1 (Child)	20	20		20
Life Pres, LPU-6/P (Infant)	7	7	0	7
Life Pres, LPU-2/P or -10/P (see note 5)	As Required	As Required	0	0
Life Pres, MB-1 (Casualty)	2	2	0	2
Survival Vest (see note 6)	As Required	8	0	0
Body Armor	0	8	0	0
Suit, Anti-Exposure, CWU-16/P	8	8	0	8
Kit, Minimum Survival (MSK)	0	0	1	0
Kit, Passenger Demonstration	1	1	0	1

- 1. Part number (P/N) 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke masks may be used until 358-series oxygen masks and goggles are available.
- 2. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger. Preposition additional EPOS for increased scheduled PAX loads.
- 3. Add additional parachutes as required by other configuration publications.
- 4. The A/C is the preferred LPU for passengers. Units may use MD-1 and LPU-5/P LPUs when A/C LPUs are not available. As a minimum, each aircraft will have one LPU for each passenger.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs.

- 6. Survival vests are required when parachutes are prepositioned aboard aircraft for bailout. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 7. Aircraft flying overwater to PDM will load one 25-person life raft, five A/C LPUs, and five anti-exposure suits to support crewmembers, as required.

3.2. **C-17 LSE:**

- 3.2.1. Configure aircraft IAW MCI 11-204, *C-17 Operations--Configuration and Mission Planning* (will convert to AFI 11-2C-17, Volume 3, Addenda A, *Aircraft Configuration*) and T.O. 1C-17A-1, *Flight Manual, USAF Series, C-17A Aircraft.* Store LSE not being used in the survival equipment locker located forward and left of the crew entrance door. LSE is the only equipment authorized for storage in the C-17 equipment locker. Store personnel restraint harnesses in the right side drawer under the forward loadmaster station. Place EPOS in the under-the-seat pouches per mission directives. ACs may request additional equipment be positioned aboard aircraft to accommodate aircrew and passenger increases, as required.
- 3.2.2. Aircraft-installed PBE devices and 358-series quick-don O2 masks are for aircrew use only. Install four PBEs in the cargo compartment and two PBEs in the auxiliary crew area (one on each side of cockpit doorway). The 358-series mask is the primary mask authorized on the flight deck and in the cargo compartment.

Table 2	$C_{-}17$	AIRCR	AFT I	CE	CONFIGUR	ATION
Table 4.	. -1/	AINLA	Arı	11.7 F	しんりりいけいて	\mathbf{A}

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 7)	Permanent Transfer
Mask, 358-series w/goggles	15	15	3	15
Emergency Escape Breathing Device (EEBD)	6	6	3	6
or Protective Breathing Equipment (PBE)				
Mask, Passenger (PAX) Oxygen (see note 1)	74	74	74	74
Emergency Passenger Oxygen System (EPOS)	102	102	0	102
(see note 2)				
Aeromedical Utility Panel Oxygen Mask	12	12	0	12
(see note 3)				
Protective Clothing Kit (PCK)	1	1	0	1
Goggle, Flash Blindness, MIL-G-635	4	4	0	4
Harness, Restraint, PCU-17/P	2	2	1	2
Parachute, BA-18M/BA-22 (see note 4)	4	4	3	4
Life Raft, 46-Person	3	3	3	3
Life Pres, Adult-Child (A/C)	110	110	0	110
Life Pres, LPU-6/P (Infant)	7	7	0	7
Life Pres, LPU-2/P or -10/P (see note 5)	4	4	0	4
Life Pres, MB-1 (Casualty)	2	2	0	2
Kit, Survival, MD-1/ML-4	4	4	3	4
Survival Vest (see note 6)	4	4	3	0
Body Armor	0	4	0	0
Suit, Anti-Exposure, CWU-16/P	4	4	0	4
Kit, Passenger Demonstration	1	1	0	1

- 1. 72 ea. above the side wall seats and 2 ea. in the latrine.
- 2. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger. Preposition additional EPOS for increased scheduled PAX loads.
- 3. Each aeromedical utility panel contains four masks.
- 4. Add additional parachutes as required by other configuration publications.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs.
- 6. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 7. Aircraft flying overwater to PDM will load three LPU-2/P or –10/P LPUs and three anti-exposure suits to support crewmembers, as required.

3.3. C-27 LSE:

- 3.3.1. Configure aircraft IAW AFI 11-2C-27, Volume 3, Addenda A, *Aircraft Configuration* (forthcoming) and T.O. 1C-27A-1, *Flight Manual, USAF Series, C-27 Aircraft.*
- 3.3.2. The Buefort RBA-20 (20-person) commercial life raft accessory kit components are listed in this publication (see **Attachment 2**).
- 3.3.3. Parachutes will be carried on all missions and will be configured IAW with this publication (refer to paragraph 10.).
- 3.3.4. Attach MD-1 or ML-4 survival kits to parachute buckles. ACs may direct repositioning of LSE based on mission requirements; however, LSE must be readily accessible for bailout. Crewmembers should return parachutes, kits, and LSE to their primary position after mission completion. ACs may request additional equipment be positioned aboard aircraft to accommodate aircrew and passenger increases, as required.

Table 3. C-27 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 7)	Permanent- Transfer
Mask, 358-series w/goggles	4	4	4	4
Mask, firefighter, smoke (see note 1)	3	3	3	3
Emergency Escape Breathing Device (EEBD)	3	3	3	3
or Protective Breathing Equipment (PBE)				
Emergency Passenger Oxygen System (EPOS)	34	34	34	34
(see note 2)				
Protective Clothing Kit (PCK)	1	1	1	1
Goggle, Flash Blindness, MIL-G-635	4	4	4	4
Harness, Restraint, PCU-17/P	1	1	1	1
Parachute, BA-18M/BA-22 (see note 3)	4	4	4	4
Life Raft, 20-Person (Buefort RBA-20)	2	2	2	2
Life Pres, Adult-Child (A/C) (see note 4)	34	34	34	34
Life Pres, LPU-6/P (Infant)	2	2	2	2
Life Pres, LPU-2/P or -10/P (see note 5)	4	4	4	4
Life Pres, MB-1 (Casualty)	2	2	2	2
Kit, Survival, MD-1/ML-4 (see note 3)	4	4	4	4
Survival Vest (see note 3, 6)	4	4	4	0
Body Armor	0	4	0	0
Suit, Anti-Exposure, CWU-16/P (see note 3)	4	4	4	4
Kit, Passenger Demonstration	1	1	1	1

NOTE:

1. P/N 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke masks may be used until 358-series oxygen masks and goggles are available.

- 2. EPOS is the preferred passenger oxygen, smoke, and fume protection. Passenger oxygen kits (POK) may be used as a substitute until EPOS is available. As a minimum, each aircraft will have one EPOS per passenger regardless of planned flight altitude. Preposition additional EPOS for increased scheduled PAX loads. Mixing of EPOS and POKs on the same aircraft is not authorized. If POKs are used, provide one POK for each occupant IAW AFI 11-202, Volume 3, General Flight Rules (formerly AFI 11-206).
- 3. Parachutes, MD-1 or ML-4 survival kits and survival vests will be carried on the aircraft at all times. A minimum of one parachute, survival kit and vest, and anti-exposure suit per crewmember will be loaded on the aircraft during increased scheduled crew loads. Add additional parachutes and survival kits and vests as required by other configuration publications. Place additional parachutes for airdrop missions, as required.
- 4. The A/C LPU is the preferred LPU. Preposition additional A/C LPUs to meet increased scheduled PAX loads. As a minimum, each aircraft will have one LPU for each passenger.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs.
- 6. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 7. An ALS specialist accompanies all depot and PDM inputs to Waco TX to exchange LSE.

3.4. **C-130 LSE:**

- 3.4.1. Preposition LSE in locations determined by MCI 11-258, *C-130 Configuration/Mission Planning* (will convert to AFI 11-2C-130, Volume 3, Addenda A, *Aircraft Configuration*), and T.O. 1C-130B-1, T.O. 1C-130H-1, T.O. 1C-130(K)H-1, and T.O. 1C-130(L)H-1, *Flight Manual, USAF Series, C-130 Aircraft*.
- 3.4.2. When equipment racks are installed, all LSE except parachutes and attached ML-4 survival kits will be stored on the LSE racks.
- 3.4.3. Attach ML-4 survival kits to parachute buckles. ACs may direct repositioning of LSE based on mission requirements; however, LSE must be readily accessible for bailout. Crewmembers should return parachutes, kits, and LSE to their primary position after mission completion. ACs may request additional equipment be positioned aboard aircraft to accommodate aircrew and passenger increases, as required.

Table 4. C-130 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 10)	Permanent Transfer (see note 11)
Mask, 358-series w/goggles	4	4	4	4
Mask, firefighter, smoke (see note 1)	2	2	2	2
Emergency Escape Breathing Device (EEBD)	6	6	6	6
or Protective Breathing Equipment (PBE)				
(see note 2)				
Emergency Passenger Oxygen System (EPOS) <i>PAX</i> use (see note 3)	40	60	0	60
Protective Clothing Kit (PCK)	1	1	0	1
Goggle, Flash Blindness, MIL-G-635	4	4	0	4
Harness, Restraint, PCU-17/P	3	3	2	3
Parachute, BA-18M/BA-22 (see note 4)	6	6	5	6
Life Raft, 20-Person (F-2B)	4	4	0	4
Life Pres, Adult-Child (A/C) (see note 5)	40	60	0	60
Life Pres, LPU-6/P (Infant)	4	4	0	4
Life Pres, LPU-2/P or -10/P (see note 6)	6	6	0	6
Life Pres, MB-1 (Casualty)	2	2	0	2
Kit, Survival, ML-4 (see note 4, 7)	6	6	0	6
Survival Vest (see note 4, 8)	6	6	5	0
Body Armor	0	6	0	0
Suit, Anti-Exposure, CWU-16/P (see note 4, 9)	6	6	0	6
Kit, Passenger Demonstration	1	1	0	1

- 1. P/N 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke masks may be used until 358-series oxygen masks and goggles are available. Smoke masks will not be placed on the flight deck.
- 2. Four EEBDs or PBEs will be placed on the flight deck and two in the cargo compartment.
- 3. EPOS is the preferred passenger oxygen, smoke, and fume protection. POKs may be used as a substitute until EPOS is available. As a minimum, each aircraft will have one EPOS per passenger regardless of planned flight altitude. Preposition additional EPOS or POKs for increased scheduled PAX loads. Mixing of EPOS and POKs on the same aircraft is not authorized. If POKs are used, provide one POK for each occupant IAW AFI 11-202, Volume 3 (formerly AFI 11-206). EPOS or POKs are not required when flying local training missions and passengers are not aboard aircraft.
- 4. Parachutes, ML-4 survival kits, and survival vests are required on all missions. Exception: Refer to note 7 for ML-4 survival kits. A minimum of one parachute, survival kit and vest, and anti-exposure suit per crewmember will be prepositioned aboard the aircraft during increased scheduled crew loads. Place additional parachutes for airdrop missions, as required.

- 5. The A/C LPU is the preferred LPU. Preposition additional LPUs to meet increased scheduled PAX loads. As a minimum, each aircraft will have one LPU for each passenger. LPU-2/P or -10/P LPUs are a suitable substitute for the A/C LPU for passenger use until A/C LPUs are available. If LPU-2/P or -10/P LPUs are used, AC or designated aircrew representative will ensure these LPUs are pre-fitted to passengers prior to take off.
- 6. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs.
- 7. Only required on designated overwater flights. Quantities will match quantities of parachutes aboard aircraft.
- 8. Survival vests are required when parachutes are prepositioned aboard aircraft for bailout. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 9. Only required on designated overwater flights.
- 10. Aircraft flying overwater to PDM will load one 20-person life raft, five ML-4 kits, five LPU-2/P or -10/P LPUs, and five anti-exposure suits to support crewmembers, as required.
- 11. For inter- and intra-command transfer of aircraft, position LSE on each aircraft IAW permanent transfer configuration. Units gaining transferred aircraft, including PDM aircraft, will contact the losing organization's ALS section and initiate transfer of required aircraft-installed LSE and inspection records. The gaining ALS organization will conduct an aircraft acceptance inspection and forward a copy of discrepancies, to include any equipment shortages, to their respective MAJCOM IAW T.O. 00-20-1. Do not transfer aircraft with less than the required equipment. The losing organization will make up any necessary shortages from on-hand assets to ensure transferring aircraft has required equipment.

3.5. C-141 LSE:

- 3.5.1. Configure aircraft and position PAX masks for each aircraft configuration IAW AMCR 55-4, *C-141B Configuration/Mission Planning* (will convert to AFI 11-2C-141, Volume 3, Addenda A, *Aircraft Configuration*), and T.O. 1C-141B-1, *Flight Manual, USAF Series, C-141 Aircraft*. Configure each C-141 with an applicable number of PAX masks as missions dictate.
- 3.5.2. C-141 units without an airdrop mission will maintain personnel parachutes and LPUs for 25 percent of PAI in support of Air Force's "GLOBAL ENGAGEMENT" mission, whichever is greater. Not applicable to Altus AFB (AETC) and AFMC.

Table 5. C-141 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 8)	Permanent Transfer
Mask, 358-series w/goggles	8	8	4	8
Mask, Firefighter, Smoke (see note 1)	2	2	0	2
Mask, AWACS (MBU-12/P or -5/P) (see note 1)	5	5	0	5
Emergency Escape Breathing Device (EEBD)	4	4	4	4
or Protective Breathing Equipment (PBE)				
Mask, Passenger (PAX) Oxygen (see note 2)	150	150	0	150
Emergency Passenger Oxygen System (EPOS)	150	150	0	150
(see note 3)				
Protective Clothing Kit (PCK)	1	1	0	1
Goggle, Flash Blindness, MIL-G-635	3	3	0	3
Harness, Restraint, PCU-17/P	2	2	1	2
Parachute, BA-18M/BA-22 (see note 4)	As Required	As Required	0	0
Life Raft, 20-Person (F-2B)	6	6	0	6
Life Pres, Adult-Child (A/C) or, (see note 5)	160	160	0	160
Life Pres, LPU-5/P (Adult) with,	140	140		140
Life Pres, MD-1 (Child)	20	20		20
Life Pres, LPU-2/P or -10/P (see note 6)	As Required	As Required	0	0
Life Pres, LPU-6/P (Infant)	7	7	0	7
Life Pres, MB-1 (Casualty)	2	2	0	2
Survival Vest (see note 7)	As Required	6	0	0
Body Armor	0	6	0	0
Suit, Anti-Exposure, CWU-16/P	6	6	0	6
Kit, Minimum Survival (MSK)	0	0	1	0
Kit Passenger Demonstration	1	1	0	1

- 1. P/N 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke and AWACS masks may be used until 358-series oxygen masks and goggles are available.
- 2. Preposition 50 containers with 3 PAX masks installed.
- 3. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger. Preposition additional EPOS for increased scheduled PAX loads.
- 4. Add additional parachutes as required by other configuration publications.
- 5. The A/C LPU is the preferred LPU for passengers. MD-1 and LPU-5/P LPUs may be used when A/C LPUs are not available. As a minimum, each aircraft will have one LPU for each passenger.
- 6. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs.

- 7. Survival vests are required when parachutes are prepositioned aboard aircraft for bailout. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 8. Aircraft flying overwater to PDM will load one 20-person life raft, four A/C LPUs, and four anti-exposure suits to support crewmembers, as required.

3.6. **KC-10 LSE:**

- 3.6.1. Configure aircraft IAW MCR 55-10, *KC-10 Configuration* (will convert to AFI 11-2KC-10, Volume 3, *Operations Procedures*) and T.O. 1C-10(K)A-1, *Flight Manual, USAF Series, KC-10A Aircraft*. LSE is contractor operated and maintained base supply (COMBS) provided and ALS maintained. Responsibilities are as followed:
 - 3.6.1.1. Serviceable slide-rafts are inspected by the depot level contractor, installed by maintenance personnel, and are not the responsibility of ALS.
 - 3.6.1.2. Each KC-10 ALS squadron will maintain a minimum of five 7-person life rafts for the 25- and 27-pallet configuration (Code E).
 - 3.6.1.3. Each KC-10 squadron ALS will build up one auxiliary survival kit (ASK) for installation on each assigned aircraft. To assemble this kit, line a 7-person accessory kit with 1" Etha Foam, ensuring it will float and pack with survival components (see **Attachment 3**). Document inspections on applicable AFTO Forms and attach a DD Form 1574, *Serviceable Tag -- Materiel*, to each kit annotating date inspected and date due next inspection, and ensure the time-change information is annotated on the reverse side of tag. Stencil each ASK with 1-inch black letters to read as follows:

AUXILIARY SURVIVAL KIT, KC-10 SURVIVAL COMPONENTS INSIDE

- 3.6.2. Preposition two PBEs on KC-10s; one in the boom operator's compartment and one in the cockpit. Position and install the PBEs in such a way to allow crewmembers quick access at all times in case of an emergency.
- 3.6.3. The aircraft LSE compartments are restricted to storing anti-exposure suits, casualty LPUs, infant cots, O2 masks' six foot hose and cable assemblies, a 7-person life raft, survival vests, and an ASK.

Table 6. KC-10 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM	Permanent-
			Input	Transfer
Mask, 358-series w/goggles	16	16	10	16
Emergency Escape Breathing Device (EEBD)	2	2	2	2
or Protective Breathing Equipment (PBE)				
Hose, 6-Ft. w/cable assemblies	4	4	4	4
Emergency Passenger Oxygen System (EPOS)	21	As Required	(see note 1)	21
(see note 1)				
Protective Clothing Kit (PCK)	1	1	0	1
Life Raft, 7-Person (LRU-1/P) (see note 2)	1	1	0	1
Life Pres, Adult-Child (A/C) (see note 3)	21	As Required	0	21
Life Pres, LPU-6/P (Infant) (see note 4)	4	4	0	4
Life Pres, LPU-2/P or -10/P (see note 5)	0	4	0	4
Life Pres, MB-1 (Casualty)	2	2	0	2
Auxiliary Survival Kit (ASK)	1	1	1	1
Survival Vest (see note 6)	0	4	0	0
Body Armor	0	4	0	0
Suit, Anti-Exposure, CWU-16/P	4	4	0	4
Kit, Minimum Survival (MSK)	0	0	1	0
Kit, Passenger Demonstration	1	1	0	1

- 1. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger. Preposition additional EPOS for increased accommodation unit (IAU) configurations, as required. Preposition one EPOS per maintenance personnel during PDM input.
- 2. Preposition raft for 25- and 27-pallet configuration only (Code E).
- 3. Preposition additional LPUs for IAUs configurations, as required. As a minimum, each aircraft will have one LPU for each crewmember and passenger. For IAU configuration, preposition 80 LPUs.
- 4. Maintain 4 ea. per IAU or the capability to configure 50% of PAI, whichever is greater.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with survival vests and must not be used as a substitute for these LPUs.
- 6. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty.

3.7. KC-135 LSE:

3.7.1. Configure aircraft IAW MCR 55-135, *C-135 Air/Land Operations--Aircraft Configuration* (will convert to AFI 11-2KC-135, Volume 3, *Operations Procedures*), T.O. 1C-135(K)R-1, and T.O. 1C-135(K)E(II)-1, *Flight Manual, USAF Series, KC-135R and KC-135E Aircraft*.

3.7.2. Attach survival kits to parachute buckles and hang in the rear of the aircraft. ACs may direct repositioning of LSE based on mission requirements; however, LSE must be readily accessible for bailout. Crewmembers should return parachutes, kits, and LSE to their primary position after mission completion. ACs may request additional equipment be positioned aboard aircraft to accommodate aircrew and passenger increases, as required.

3.7.3. Live-Aboard Accommodations.

- 3.7.3.1. Units will establish aircraft live-aboard capability consisting of live-aboard kits (LAK), 3 cases of cold weather (CW) or 4 cases of meal-ready-to-eat rations and 1,800 ounces of water as a minimum IAW AMCI 10-450, Volume 3, *Aircraft Performance Factors* (classified). This will allow single-integrated operational plan (SIOP) aircrew to reside on the aircraft for a minimum of three days at forward operating locations should the situation arise. LAK components are listed in this publication (see **Attachment 4**). Not applicable to Altus AFB (AETC) and AFMC.
- 3.7.3.2. Each organization with a SIOP commitment will have sufficient LAKs (plus spares) for all PAI aircraft. ALS will build LAKs using A-3 bags, A-21 canvas containers, or equivalent. Inner containers should be assembled with rigid reinforced fiberboard boxes or equivalent. Inspect kits and contents annually. Document AFTO Form 338, *Survival Kit Record*, as required. Attach a DD Form 1574 to the A-3 bags or A-21 canvas containers, annotating date inspected and date due next inspection.
- 3.7.3.3. Requirements for subsistence items are shared responsibilities among ALS (delivery, uploading, and downloading), Operations and Plans (quantify as per mission needs), and Services (commissary liaison, approval agency, and memorandum of understanding [MOU]). Representatives from these organizations will establish a MOU. The MOU will specify and define responsibilities for forecasting, funding, requisitioning, storing, and issuing rations to best meet the wing's SIOP mission. Responsibilities for subsistence rations and water are contained in AFI 25-101, *War Reserve Material (WRM) Program Guidance and Procedures*. Due to the lack of proper refrigerated storage facilities within ALS facilities, some rations will require courtesy storage at appropriate facilities.
- 3.7.3.4. During live-aboard conditions, carbon monoxide detectors are required for all models of KC-135 aircraft.

Table 7. C/KC-135 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine- Trainer	Tanker- Task- Force	Channel Miss- sions	SIOP Alert (see note 9)	Overseas Deployer (ITUD)	PDM Input (see note 10)	Permanent Transfer (see note 11)
Mask, 358-series w/goggles	4	4	4	4	4	4	4
Mask, firefighter, smoke (see note 1)	2	2	2	2	2	2	2
Emergency Escape Breathing Device	2	2	2	2	2	2	2
or Protective Breathing Equipment							
Emergency Passenger Oxygen System (EPOS) (see note 2)	20	60	60	20	60	(see note 2)	60
Protective Clothing Kit (PCK)	1	1	1	1	1	0	1
Goggle, Flash Blindness, EEU-series	0	4	0	4	4	0	0
(see note 3)							
Parachute, BA-18M/BA-22	6	6	6	6	6	4	6
Life Raft, 20-Person (F-2B)	1	3	3	1	3	0	3
Life Pres, Adult-Child (A/C) or,	20	60	60	20	60	0	60
Life Pres, LPU-5/P (Adult) with,							
Life Pres, MD-1 (Child) (see note 4)							
Life Pres, LPU-6/P (Infant)	5	5	5	5	5	0	5
Life Pres, LPU-2/P or -10/P (see note 5)	6	6	6	6	6	0	6
Life Pres, MB-1 (Casualty) (see note 6)	2	2	2	2	2	0	2
Kit, Survival, MD-1/ML-4	6	6	6	6	6	0	6
Survival Vest (see note 7)	6	6	6	6	6	4	0
Body Armor	0	6	0	6	6	0	0
Live-Aboard Kit (LAK) (see note 8)	0	0	0	1	0	0	0
Suit, Anti-Exposure, CWU-16/P	6	6	6	6	6	0	6
Kit, Passenger Demonstration	1	1	1	1	1	0	1

- 1. P/N 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke masks may be used until 358-series oxygen masks and goggles are available.
- 2. EPOS is the preferred passenger oxygen, smoke, and fume protection. POKs may be used as a substitute until EPOS is available. As a minimum, each aircraft will have one EPOS per passenger regardless

- of planned flight altitude. Preposition additional EPOS or POKs for increased scheduled PAX loads. Mixing of EPOS and POKs on the same aircraft is not authorized. If POKs are used, provide one POK for each occupant IAW AFI 11-202, Volume 3 (formerly AFI 11-206). Preposition one EPOS or POK per maintenance personnel during PDM input.
- 3. MIL-G-635 goggles will be uploaded as sets to back-fill for missing or defective sets of EEU-series goggles.
- 4. The A/C LPU is the preferred LPU for passengers. MD-1 and LPU-5/P LPUs may be used when A/C LPUs are not available. As a minimum, each aircraft will have one LPU for each passenger.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with parachutes and survival vests and must not be used as a substitute for these LPUs. Altus AFB is only required to preposition LPU-2/P or -10/P LPUs during routine trainer missions.
- 6. Install additional MB-1s as required by mission directives.
- 7. Survival vests are required when parachutes are prepositioned aboard aircraft for bailout. Survival vests provide crewmembers the necessary survival items on the ground while waiting for rescue or return to duty. Quantities will match quantities of parachutes aboard aircraft.
- 8. LAKs are not required when SIOP crews are issued "A" and "B" mobility bags.
- 9. For live-aboard accommodations, refer to paragraph 3.7.3.
- 10. Aircraft flying overwater to PDM will load one 20-person life raft, four ML-4 kits, four LPU-2/P or -10/P LPUs, and four anti-exposure suits to support crewmembers, as required.
- 11. For inter- and intra-command transfer of aircraft, position LSE on each aircraft IAW permanent transfer configuration. Units gaining transferring aircraft, including PDM aircraft, will contact the losing organization ALS section and initiate transfer of required aircraft-installed LSE and inspection records. The gaining ALS organization will conduct an aircraft acceptance inspection and forward a copy of discrepancies, to include any equipment shortages, to their respective MAJCOM in accordance with T.O. 00-20-1, section V. Do not transfer aircraft with less than the required equipment. The losing organization will make up any necessary shortages from on-hand assets to ensure transferring aircraft has required equipment.

3.8. Operational Support Airlift (OSA) Aircraft:

3.8.1. Configure C-9 aircraft IAW MCI 11-209, *C-9A Airlift Operations* (will convert to AFI 11-2C-9A, Volume 3, *Operations Procedures*) and T.O. 1C-9A-1, *Flight Manual, USAF Series, C-9A Aircraft*. The minimum survival kit (MSK) components for C-9 aircraft are listed in this publication (see **Attachment 5**).

Table 8. C-9A AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 7)	Permanent- Transfer
Mask, 358-series w/goggles	3	3	3	3
Mask, Firefighter, Smoke (see note 1)	1	1	0	1
Mask, AWACS (MBU-12/P or -5/P) (see note 2)	5	5	0	5
Emergency Escape Breathing Device (EEBD)	8	8	3	8
or Protective Breathing Equipment (PBE)				
Mask, Passenger Oxygen (PAX)	67	67	67	67
Emergency Passenger Oxygen System (EPOS)	50	50	0	50
(see note 3)				
Harness, Restraint, PCU-17/P	1	1	1	1
Life Raft, 20-Person (F-2B)	3	3	0	3
Life Pres, Adult-Child (A/C) or, (see note 4)	50	50	0	50
Life Pres, LPU-5/P (Adult) with,	40	40		40
Life Pres, MD-1 (Child)	10	10		10
Life Pres, LPU-6/P (Infant)	5	5	0	5
Life Pres, LPU-2/P or -10/P (see note 5)	0	8	0	8
Life Pres, MB-1 (Casualty)	20	20	0	20
Survival Vest (see note 6)	0	8	0	0
Body Armor	0	8	0	0
Suit, Anti-Exposure, CWU-16/P	8	8	0	8
Kit, Minimum Survival (MSK)	0	0	1	0
Kit, Passenger Demonstration	1	1	0	1

- 1. P/N 358-1506 series oxygen mask with goggles attached is the preferred smoke and fume protection for aircrew personnel. Firefighters smoke masks may be used until 358-series oxygen masks and goggles are available.
- 2. AWACS masks may be replaced with P/N 358-1506 series mask.
- 3. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger. Preposition additional EPOS for increased scheduled PAX loads.
- 4. The A/C LPU is the preferred LPU for passengers. MD-1 and LPU-5/P LPUs may be used when A/C LPUs are not available. As a minimum, each aircraft will have one LPU for each passenger.
- 5. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with survival vests and must not be used as a substitute for these LPUs.
- 6. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty.

- 7. Aircraft flying overwater to PDM will load one 20-person life raft, three LPU-2/P or -10/P LPUs, and three anti-exposure suits to support crewmembers, as required.
 - 3.8.2. Configure C-20 aircraft IAW MCI 11-221, *Operational Support Airlift (OSA) Aircraft Operations* (will convert to AFI 11-2OSA-DV, Volume 3, *Operations Procedures*) and T.O. 1C-20A-1, *Flight Manual, USAF Series, C-20A Aircraft*. LSE installed on C-20 aircraft is COMBS provided. ALS assists in the maintenance of equipment.

Table 9. C-20 AIRCRAFT LSE CONFIGURATION

Minimum Required Equipment	Routine	Contingency	PDM Input (see note 3)	Permanent- Transfer
Mask, EROS, w/goggles	3	3	3	3
Mask, Firefighter, Smoke (see note 1)	2	2	0	2
Emergency Escape Breathing Device (EEBD)	2	2	2	2
or Protective Breathing Equipment (PBE)				
Mask, Passenger Oxygen (PAX)	20	20	20	20
Emergency Passenger Oxygen System (EPOS)	19	19	0	19
(see note 2)				
Life Raft, 7- or 9-man	3	3	0	3
Life Pres, Adult-Child (A/C)	19	19	0	19
Suit, Anti-Exposure, CWU-16/P	3	3	0	3
Kit, Minimum Survival (MSK)	0	0	1	0
Kit, Passenger Demonstration	1	1	0	1

- 1. Use Scott Commercial Smoke Mask, P/N 10100 or 10800 series.
- 2. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger.
- 3. Aircraft flying overwater to PDM will load 1 life raft, three LPU-2/P or -10/P LPUs, and three anti-exposure suits to support crewmembers, as required.
 - 3.8.3. Configure C-21 aircraft IAW MCI 11-221 (will convert to AFI 11-2OSA [C-21], Volume 3, *Operations Procedures*) and T.O. 1C-21A-1, *USAF Model, C-21A Aircraft Flight Manual*. ALS will maintain sufficient quantities of life rafts for C-21 aircraft to satisfy contingency requirements based on unit type codes (UTC) and to support overwater flights. Non-mobility units will maintain at least one T-9AF or LRU-14-series life raft for contingency purposes. T-9AF and LRU-14-series life raft accessory components are listed in this publication (see **Attachment 6**). The MSK components for C-21 aircraft are listed in this publication (see **Attachment 5**).

PDM Minimum Required Equipment **Routine** Contingency Permanent-Input (see Transfer note 4) Mask, 359-series w/goggles 2 2 2 2 Emergency Escape Breathing Device (EEBD) 2 2 or Protective Breathing Equipment (PBE) Mask, Passenger (PAX) Oxygen 11 11 11 11 Emergency Passenger Oxygen System (EPOS) 10 10 0 10 (see note 1) Life Raft, T-9AF/LRU-14-series 0 0 1 Life Pres, Adult-Child (A/C) 10 10 0 10 Life Pres, LPU-2/P or -10/P (see note 2) 2 0 0 2 Life Pres, MB-1 (Casualty) 0 0 As Required As Required Survival Vest (see note 3) 0 0 2 **Body Armor** 0 0 0 Suit, Anti-Exposure, CWU-16/P 2 0 2 As Required Kit, Minimum Survival (MSK) 1 1 1 1 Kit, Passenger Demonstration 1 1 0 1

Table 10. C-21 AIRCRAFT LSE CONFIGURATION

- 1. EPOS is the preferred passenger oxygen, smoke, and fume protection. As a minimum, each aircraft will have one EPOS per passenger.
- 2. LPU-2/P or -10/P LPUs are required to integrate with LSE and are designed for use by aircrew personnel. A/C LPUs are not compatible for use with survival vests and must not be used as a substitute for these LPUs.
- 3. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty.
- 4. Aircraft flying overwater to PDM will load 1 life raft, two LPU-2/P or -10/P LPUs, and two anti-exposure suits to support crewmembers, as required.
 - 3.9. **VIP Special Air Missions (VIPSAM) LSE.** Due to the unique mission and limited assets of the VIPSAM operations and other unique missions, each MAJCOM ALS staff is responsible for supplementing this publication with requirements relevant to their respective units. Each VIPSAM unit will provide their respective MAJCOM with an aircraft LSE configuration table for each MDS assigned.

3.10. Aeromedical Evacuation (AE) Missions:

3.10.1. ALS units, when supporting AE missions and aircrew, will build and maintain the equipment listed in **Table 11.** The equipment will be placed in kits assigned to, and deployed with, an AE in-flight kit (UTC FFQDM). Each ALS unit supporting an AE squadron will maintain a minimum of 2 AE ALS kits (**Table 11.**) for WRM. Exception: PACAF and USAFE ALS squadrons supporting AE operations will build and maintain eight (8) kits. Individual MAJCOMs will direct what units will maintain for local training and operational missions.

- 3.10.2. Travis, McGuire and Charleston AFBs will maintain the number of AECM support kits listed in **Table 12**. Seventy five percent (75%) of the total number of AECM support kits at each unit will be maintained ready at all times. If the AECM support kit capability goes below the 75% level, the unit will immediately notify HQ AMC/DOT in writing. The notification must include a detailed analysis of the problem and a projected get-well date.
- 3.10.3. Once built, MAJCOMs may authorize ALS sections maintaining AECM support kits to seal and place the kits in serviceable storage inspection status and inspect on an annual basis if time-change items' expiration dates permit. Upon notification of the need to deploy the AECM support kits, the ALS section will inspect the kit and place each item on a normal inspection cycle and deliver the kits to the designated organization within 24 hours.

Table 11. AECM SUPPORT KIT EQUIPMENT

AE EQUIPMENT	AECM SUPPORT KIT EQUIPMENT QTY
Mask, 358-series w/goggles	7
Notes 1, 2	
Survival Vest	7
Note 3	
Body Armor	7
Note 3	
Life Pres, LPU-10/P	7
Note 4	
Suit, Anti-Exposure, CWU-16/P	7
Note 4, 5	

- 1. Cabin/Cargo Area Aircrews will use the EPOS already prepositioned on the aircraft for emergency oxygen requirements for preplanned flights up to flight level 350 (FL350). For preplanned flights above FL350, all AE aircrew must have a quick-don mask with goggles attached (paragraph 3.11.1.) to a walk-around bottle available for use.
- 2. Medical crew director (MCD) and charge medical technician (CMT) must have communication capability in their quick-don mask.
- 3. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. The Air AceTM/Ace AdvantageTM [Air AdvantageTM] (paragraph 4.) is the primary integrated survival vest and aircrew body armor for AE Squadron personnel. The SRU-21/P is also authorized (paragraph 4.3.). AE Squadron personnel are authorized to request assigned equipment for unit training events.

- 4. Required for preplanned overwater flights only.
- 5. CWU-16/P or MAJCOM approved equivalent IAW T.O. 1-1-641.

Table 12. ALS AECM SUPPORT KIT HUB LOCATIONS

ALS AECM Support Kit Hub Locations	Authorized Number of Kits	75 Percent Level of Total Authorization
Travis AFB (60 OSS)	50	38
McGuire AFB (305 OSS)	50	38
Charleston AFB (437 OSS)	22	16

3.10.4. Civil Reserve Air Fleet (CRAF) Missions. All AE aircrews flying on CRAF aircraft are exempt from having to use the ALS equipment in **Table 11.**, except for the 358-series quick-don mask. These masks are required for protection from smoke and fumes and emergency decompressions. Travis and Charleston AFBs will maintain twelve (12) and thirteen (13) kits respectively, containing seven (7) each LPU-6/P infant cot life preservers and eleven (11) each EPOS to support AE CRAF missions. These CRAF support kits will only be mobilized to support CRAF AE operations.

3.10.5. **Table 13.** lists contact information for each hub location's medical logistics area controlling the medical portion of the FFQDM kit. Each ALS section at AE hub locations will contact and establish a local notification and delivery plan of the ALS portion of the kits to the medical logistics office (paragraph **3.10.3.**). Once coordinated, forward the local plan to HQ AMC/DOTL and send an info copy to HQ USAF/XOOT. Include these plans in the next review or revision of the unit's operating instructions or local directives.

Table 13. MEDICAL LOGISTICS CONTACT INFORMATION

TRAVIS AFB	MCGUIRE AFB	CHARLESTON AFB
60 MDSS/SGSL	305 MDSS/SGSLW	437 MDSS/SGSL
101 Bodin Circle (Bldg 777)	3418 McGuire Road	204 W. Hill Blvd (Bldg 364)
Travis AFB CA 94535-1825	McGuire AFB NJ 08641	Charleston AFB SC 29404-5300
DSN 779-7973/3962	DSN: 650-4818/6454/9313	DSN 673-6529/6527/6761
COMM: (707) 423-XXXX	COMM: (609) 754-XXXX	COMM: (843) 963-XXXX
,		
FM4427	FM4484	FM4418
POC Position: NCOIC WRM	POC Position: NCOIC WRM	POC Position: NCOIC WRM

3.11. Aircraft-Installed Aircrew Oxygen Masks:

3.11.1. Quick-don O2 masks (P/N 358-1506V, P/N 358-1390V3 [KC-10s], and P/N 359-A1C12 [C-21s]) with anti-smoke goggles (P/N 322-70) attached to mask are the preferred aircrew smoke

- and fume protection system. This mask and goggle system may also be used as a preferred substitute for firefighter smoke masks.
- 3.11.2. Position 358- and 359-series quick-don O2 masks and goggles at each crew station. Masks and goggles and other safety equipment must remain with the aircraft while in depot to conduct functional check flights.
- 3.11.3. Control masks either by serial number or locally assigned number.
- 3.11.4. Dust covers or mask bags provide critical protection and are required on all air-craft-installed aircrew O2 masks.
- 3.11.5. O2 masks installed in the crew bunk area aboard C-5s do not require microphones.
- 3.12. **Life Rafts.** Position sufficient types of life rafts aboard each aircraft on overwater flights to accommodate all aircrew and passengers IAW T.O. 14S3-1-3, *Type and Number of Individual Survival Kit Containers and Life Rafts To Be Used In Various Type Aircraft*, and applicable MDS configuration tables. Place additional life rafts aboard aircraft when required. Ensure a DD Form 1574 is attached to each aircraft life raft and aircraft actuation handles for life rafts installed in wing well, silos, etc. Ensure the time-change information is annotated on the reverse side of tag IAW T.O. 14S-1-102. C-141 units will maintain additional life rafts IAW the allowance standard (AS 016) for contingencies.

3.13. Life Preserver Units (LPU):

- 3.13.1. The A/C LPU is the preferred LPU for aircrew and passengers during normal ditching situations. Units should pursue replacement of MBU-5/P, MD-1, LPU-2/P or -10/P LPUs for passenger use. The A/C LPU does not require pre-fitting prior to flight and is easier to don during emergency situations. As a minimum, each aircraft will have one LPU for each passenger during overwater flights. C-141 units will maintain additional LPUs IAW AS 016 for contingencies.
- 3.13.2. The LPU-2/P or -10/P LPUs are required and are designed to integrate with LSE. Crewmembers wearing parachutes, survival vests, anti-exposure suits, and aircrew chemical defense equipment must use these LPUs during bailout or ditching. A/C LPUs are not compatible for use with LSE and must not be used as a substitute for these LPUs.
- 3.14. Emergency Escape Breathing Device (EEBD) and Protective Breathing Equipment (PBE). Units will utilize EEBDs, P/N 802300-11, or PBEs, P/N 802300-14, with the fire retardant polyethylene (green) storage container, P/N 803753-01, and neoprene neck seal. EEBD, P/N 802300-11, is an obsolete part number and PBE P/N 802300-14 is considered the primary device. Units may still utilize EEBDs, P/N 802300-11, until item's service-life expires. Units will not substitute above items with PBE, P/N 802300-01, with the polyethylene (daglo orange) container and ure-thane neck seal. ALS personnel should limit how often the EEBDs and PBEs are removed from or installed into the container to reduce wear-and-tear on the vacuum-sealed bag. EEBDs and PBEs will remain in their original "hard" carrying case to provide fire and puncture-proof protection.

3.15. Passenger Oxygen Kits (POK):

3.15.1. EPOS is the preferred passenger oxygen, smoke, and fume protection. POKs may be used, as suitable substitutes for EPOS until EPOS is available. For C-27s, C-130s, and C/KC-135s, preposition POKs at passenger positions. Secure the POK on the upper seat support tube using a tie-down strap (NSN 5975-00-984-6582 or equivalent) and a quick release snap (i.e., FASTTEX buckle, P/N SR1, or equivalent). Position the POK bags to the forward side of the passenger and between the seat back webbing to ensure rapid access. Ensure caution tag and retainer pin is removed when POKs are prepositioned on aircraft. For KC-135 aircraft, position three EPOS or POKs aboard aircraft: one in the latrine, one in the cockpit, and one at the galley. AETC students are allowed to preposition POKs, as required.

4. Integrated Survival Vest/Body Armor (Air Ace'/Ace Advantage' [Air Advantage']):

- 4.1. During contingency missions, permanently prepositioned integrated survival vest and body armor on all aircraft as indicated in the applicable MDS configuration tables. C-17, C-27, C-130, and KC-135 aircraft will have survival vests prepositioned aboard aircraft at all times.
- 4.2. Survival vests will contain the mandatory communication and signaling devices needed to aid aircrew during survival IAW T.O. 14S1-3-51, *Base Assembly, Use and Maintenance of Survival Kits*, and this publication (see **Attachment 7**). Time-change items and munitions installed in survival vests going to depot facilities will have a minimum of one-year remaining on service-life. When the survival vest is carried on commercial airlines, remove the following items IAW T.O. 00-20-1: Signal, smoke and illumination, MK-13 or MK-124; Signal kit, personnel distress, A/P 25S-5A; container, waterproof, with matches; and knife, pocket.
- 4.3. SRU-21/P survival vests are still authorized until the integrated survival vest and body armor becomes available. AECMs are also authorized integrated survival vest and body armor or SRU-21/P survival vests.
- 4.4. Integrated survival vest and body armor will be donned prior to going into harm's way. Safeguard survival vests and body armor by placing in a metal container (NSN 5140-00-226-9019), footlocker (NSN 8460-00-243-3234), or equivalent.
 - 4.4.1. Stencil each container with at least 1-inch letters (all caps) on top and front of container to read as follows:

AIRCREW

CONTINGENCY KIT

SURVIVAL VESTS/BODY ARMOR

4.4.2. Stencil each container with at least 1-inch letters (all caps) on ends to read as follows:

Command (e.g., AMC, ACC, USAFE, PACAF, AFRC, or ANG)

Unit (e.g., 123 AW or 456 ARW)

Local ID Number (e.g., Kit 1A)

KIT 1A

5. ML-4 Survival Kits. ML-4 survival kits will contain the mandatory components listed in this publication (see Attachment 8). Items not identified as mandatory are recommended components. MAJCOMs have the option to duplicate signaling devices currently installed in survival vests or mandate the survival vest as a required item for bailout.

6. Anti-Exposure Suits:

- 6.1. Anti-exposure suit requirements are based on aircraft PAI and primary crew complement when pre-planned overwater flights meet the criteria of T.O. 1-1-641, *Minimum Equipment Requirements for Overwater, Arctic, and Desert-Tropic Flights*, and intent of AFI 11-202, Volume 3 (formerly AFI 11-206). The CWU-16/P may be issued to satisfy this requirement. The anti-exposure suit will provide protection for and allow crewmembers to remain in the water longer while assisting passengers into the life raft.
- 6.2. Permanently preposition anti-exposure suits on aircraft IAW MDS configuration tables. Units may bulk store suits in an A-3 bag or equivalent with a DD Form 1574 attached annotating date inspected and date due next inspection.

7. Survival Accessory Containers:

- 7.1. Units will ensure survival accessory containers contain the mandatory components listed in the applicable attachments of this publication and T.O. 14S1-3-51, Tables 8-1 and 11-1. Components annotated with an asterisk (*) in attachments of this publication are mandatory and will render the accessory container, survival vest or kit unserviceable when not installed. Place accessories in appropriate inner and outer life raft accessory containers IAW tables in T.O. 14S-1-102.
- 7.2. Mandatory components are as follows: Radio, PRC-90 series; compass, magnetic; signal mirror; signal, smoke and illumination, MK-13 or MK-124; kit, personnel distress, A/P 25S-5A; strobe light, SDU-5/E (with infrared [IR] filter and flash guard); and kit, first aid.

8. Protective Clothing Kit (PCK):

- 8.1. PCKs contain protective clothing for use by aircrew during emergencies aboard aircraft carrying hazardous cargo IAW Air Force Joint Manual (AFJMAN) 24-204, *Preparing Hazardous Materials for Military Air Shipments* (formerly AFR 71-4). Each PCK will contain the components listed in this publication (see **Attachment 9**). Units may build kits IAW AFJMAN 24-204 or purchase commercial kits meeting or exceeding AFJMAN 24-204 requirements. Units should contact base environmental or fire protection personnel to determine adequacy of commercial kits being considered.
- 8.2. Pack and seal PCKs in a locally manufactured metal or fiberglass container not to exceed 12 x 18 x 24 inches. Attach a DD Form 1574 to each container indicating the date inspected and date due next inspection. Stencil each PCK with at least l-inch letters with the following:

KIT, PROTECTIVE CLOTHING
EMERGENCY USE FOR IN-FLIGHT
HANDLING OF HAZARDOUS CARGO
ACIDS, TOXIC MATERIALS,
CLASS B AND C POISONS

9. Personnel Restraint Harnesses:

- 9.1. Personnel restraint harnesses will remain with the aircraft during depot-level maintenance, as required.
- 9.2. Personnel restraint harnesses will be equipped with oxygen connector brackets.

10. Personnel Parachutes:

- 10.1. Personnel parachutes provide aircrew members bailout capability during emergencies. Preposition sufficient types of parachutes aboard each MDS to accommodate all aircrew IAW T.O. 14D1-1-1, *Styles of Parachutes To Be Used In Various Type Aircraft*, and applicable MDS tables.
- 10.2. Personnel parachutes will be equipped with emergency locator beacons, automatic releases, emergency bailout oxygen cylinders, hook-blade knives, oxygen connector brackets, AFP 64-15, *Survival and Emergency Uses of the Parachute* (will convert to Air Force Pamphlet [AFPAM] 36-2242), Survival Kit (SRU-16/P), and personnel lowering devices (PLD).
 - 10.2.1. Emergency bailout oxygen cylinders are required for emergency bailout for flights above FL250 (25,000 feet) IAW T.O. 15X1-4-2-12, *Operation and Field Maintenance Instructions Emergency Bail-Out Oxygen Cylinder Assemblies*.
 - 10.2.2. The installation of PLDs is at the discretion of each MAJCOM.
- 10.3. Flying helmets are required for bailout and aircrew performing air defense system missions. Helmets will be carried on all missions requiring parachutes or anytime personnel parachutes are prepositioned aboard aircraft (not applicable when carrying passengers). Flying helmets must be used in conjunction with the parachute to avoid head injuries.
- 10.4. Time-change items and pyrotechnics installed in parachutes going to depot facilities will have a minimum of one-year remaining on service-life.

11. Minimum Survival Kit (MSK):

- 11.1. MSKs are mandatory when life rafts are not installed during PDM input from stateside locations. Therefore, during aircraft ferry and depot deliveries, use the MSK as a means of providing minimum signaling and survival equipment needs. MAJCOMs have the option of using a survival vest as a substitute for the MSK during PDM inputs (vests are required when carrying parachutes aboard the aircraft).
- 11.2. MSK components are listed in this publication (see **Attachment 5**). Place these survival components in a locally purchased or manufactured metal or fiberglass container, or equivalent, to provide protection of survival items.
- 11.3. Time-change items and munitions installed in MSKs going to depot facilities will have a minimum of one-year remaining on service-life. When the MSK is carried on commercial airlines, remove the following items IAW T.O. 00-20-1: Signal, smoke and illumination, MK-13 or MK-124; Signal kit, personnel distress, A/P 25S-5A; container, waterproof, with matches; and knife, pocket.

12. Passenger Demonstration Equipment:

12.1. The AC or a designated aircrew representative is responsible for briefing passengers on emergency equipment before each flight IAW AFI 11-202, Volume 3 (formerly AFI 11-206), T.O.

- 14D1-2-1, *Personnel Parachutes*, and T.O. 14S-1-102. Passenger-carrying aircraft will have a set of demonstration LSE mirroring all onboard individually issued passenger equipment (i.e., LPUs, EPOS, oxygen masks, etc.). Do not include LPU-6/P or MB-1 LPUs as part of the demonstration kit.
- 12.2. To keep this equipment segregated from operational assets, store demonstration equipment in a "red" locally manufactured storage container. Stencil both the storage container and each piece of LSE "FOR DEMONSTRATION ONLY" in 1/2-inch black (or contrasting color) lettering.
- 12.3. C-141 PAX masks; remove the container attaching plates and connectors and install two (2) demonstration passenger masks in container.
- 12.4. The demonstration POK will have a yellow carrying bag.
- 12.5. Store the demonstration EPOS in the yellow "training" pouch.

RONALD E. KEYS, Lt General, USAF DCS/Air & Space Operations

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 10-9, Lead Operating Command Weapon Systems Management

AFPD 11-3, Life Support

AFI 11-202, Volume 3, General Flight Rules (formerly AFI 11-206)

AFI 11-301, Aircrew Life Support Program

AFI 21-103, Equipment Inventory, Status, and Utilization Reporting

AFI 25-101, War Reserve Materiel (WRM) Program Guidance and Procedures

AFI 41-302, Aeromedical Evacuation Operations and Management

AFJMAN 24-204, Preparing Hazardous Materials for Military Air Shipments (formerly AFR 71-4)

AFPAM 36-2246, Aircrew Survival (formerly AFP 64-5)

AFP 64-15, Survival and Emergency Uses of the Parachute (will convert to AFPAM 36-2242)

MCI 11-203, C-5 Operations--Configuration and Mission Planning (will convert to AFI 11-2C-5, Volume 3, Addenda A, Aircraft Configuration)

MCI 11-204, *C-17 Operations--Configuration and Mission Planning* (will convert to AFI 11-2C-17, Volume 3, Addenda A, *Aircraft Configuration*)

MCI 11-209, C-9A Airlift Operations (will convert to AFI 11-2C-9A, Volume 3, Operations Procedures)

MCI 11-221, *Operational Support Airlift (OSA) Aircraft Operations* (will convert to AFI 11-2OSA [C-21] and AFI 11-2OSA-DV, Volume 3, *Operations Procedures*)

MCI 11-258, *C-130 Configuration/Mission Planning* (will convert to AFI 11-2C-130, Volume 3, Addenda A, *Aircraft Configuration*)

MCR 55-10, *KC-10 Configuration* (will convert to AFI 11-2KC-10, Volume 3, *Operations Procedures*)

MCR 55-135, *C-135 Air/Land Operations--Aircraft Configuration* (will convert to AFI 11-2KC-135, Volume 3, *Operations Procedures*)

AMCR 55-4, *C-141 Configuration/Mission Planning* (will convert to AFI 11-2C-141, Volume 3, Addenda A, *Aircraft Configuration*)

ACCI 11-301, Aircrew Life Support Program

AETCI 11-301, Aircrew Life Support Program

AFMCI 11-301, Aircrew Life Support Program

AMCI 11-301, Aircrew Life Support Program

PACAFI 11-301, Aircrew Life Support Program

USAFEI 11-301, Aircrew Life Support Program

- AFI 11-301/AFRC SUP1, Aircrew Life Support Program
- AFI 11-301/ANG SUP1, Aircrew Life Support Program
- T.O. 0-1-01, Numerical Index
- T.O. 0-1-02, General Technical Orders
- T.O. 0-1-1-1, General Aircraft
- T.O. 0-1-11, Armament Equipment
- T.O. 0-1-13, Aircraft Furnishings and In-flight Feeding Equipment, Cargo Loading, Aerial Delivery and Recovery Equipment, Aircraft Fire Detection and Extinguishing Equipment
- T.O. 0-1-14, Deceleration Devices and Personal and Survival Equipment
- T.O. 0-1-15, Aircraft and Missile Temperature Control, Pressurizing, Air Conditioning, Heating, Ice Eliminating, and Oxygen Equipment
- T.O. 00-5-1, AF Technical Order Systems
- T.O. 00-5-2, Technical Order Distribution System
- T.O. 00-20-1, Preventive Maintenance Program General Policy Requirements and Procedures
- T.O. 00-20-5, Aircraft, Drone, Aircrew Training Devices, Engines, and Air-Launched Missile Inspections, Flight Reports, and Supporting Maintenance Documents
- T.O. 00-25-241, Parachutes Logs and Records
- T.O. 1-1-641, Minimum Equipment Requirements for Overwater, Arctic, and Desert-Tropic Flights
- T.O. 1C-5A-1, Flight Manual, USAF Series, C-5A and C-5B Airplanes
- T.O. 1C-9A-1, Flight Manual, USAF Series, C-9A Aircraft
- T.O. 1C-10(K)A-1, Flight Manual, USAF Series, KC-10A Aircraft
- T.O. 1C-17A-1, Flight Manual, USAF Series, C-17A Aircraft
- T.O. 1C-20A-1, Flight Manual, USAF Series, C-20A Aircraft
- T.O. 1C-21A-1, USAF Model, C-21A Aircraft Flight Manual, Description and Operation Aircraft General Description
- T.O. 1C-27A-1, Flight Manual, USAF Series, C-27 Aircraft
- T.O. 1C-130B-1, Flight Manual, USAF Series, C-130 Aircraft
- T.O. 1C-130H-1, Flight Manual, USAF Series, C-130 Aircraft
- T.O. 1C-130(K)H-1, Flight Manual, USAF Series, C-130 Aircraft
- T.O. 1C-130(L)H-1, Flight Manual, USAF Series, C-130 Aircraft
- T.O. 1C-135(K)R-1, Flight Manual, USAF Series, KC-135R Aircraft
- T.O. 1C-135(K)E(II)-1, Flight Manual, USAF Series, KC-135E Aircraft
- T.O. 1C-141B-1, Flight Manual, USAF Series, C-141 Aircraft
- 11A-series, Munitions

11P-series, Cartridges for Escape Systems

13A-series, Aircraft Furnishings - Harnesses

14D-series, Parachutes

T.O. 14D1-1-1, Styles of Parachutes To Be Used In Various Type Aircraft

T.O. 14D1-2-1, Personnel Parachutes

14P-series, Personal Equipment Clothing

14S-series, Survival Equipment, General Life Preservers, Life Rafts, Strobe Lights, etc.

T.O. 14S-1-102, Maintenance Instructions With Parts Breakdown USAF Flotation Equipment

T.O. 14S1-3-51, Base Assembly, Use and Maintenance of Survival Kits

T.O. 14S3-1-3, Type and Number of Individual Survival Kit Containers and Life Rafts To Be Used In Various Type Aircraft

15X-series, Oxygen Cylinders, Masks, and Regulators

T.O. 15X1-4-2-12, Operation and Field Maintenance Instructions Emergency Bail-Out Oxygen Cylinder Assemblies

Abbreviations and Acronyms

AC—Aircraft Commander

A/C—Adult-Child

AECM—Aeromedical Evacuation Crew Member

AETC—Air Education and Training Command

AFI—Air Force Instruction

AFJMAN—Air Force Joint Manual

AFMC—Air Force Materiel Command

AFPAM—Air Force Pamphlet

AFPD—Air Force Policy Directive

ALS—Aircrew Life Support

AMW—Air Mobility Wing

ANG—Air National Guard

ASK—Auxiliary Survival Kit

CHEMOX—Chemical-Oxygen

COMBS—Contractor Operated and Maintained Base Supply

EEBD—Emergency Escape Breathing Device

EPOS—Emergency Passenger Oxygen System

IAU—Increased Accommodation Unit

IR—Infrared

ITUD—Integrated Tanker Unit Deployment

LAK-Live-Aboard-Kit

LPU—Life Preserver Unit

LSE—Life Support Equipment

MAJCOM—Major Command

MCI—Multi-Command Instruction

MDS—Mission Design Series

MOU—Memorandum of Understanding

MSK—Minimum Survival Kit

O2—Oxygen

PAI—Primary Aircraft Inventory

PAX—Passenger

PBE—Protective Breathing Equipment

PCK—Protective Clothing Kit

PDM—Programmed Depot Maintenance

P/N—Part Number

POK—Passenger Oxygen Kits

SIOP—Single-Integrated Operational Plan

T.O.—Technical Order

UTC—Unit Type Code

Terms

Aeromedical Evacuation Crewmembers (AECM) Qualified—flight nurses (FN), aeromedical evacuation technicians (AET), and unqualified student trainees under the direct supervision of a qualified instructor or FN, performing AE duties.

Contingency Mission—Mission required to support wartime contingencies and deployment operations.

Life Support Equipment (LSE)—LSE encompasses all equipment (aircrew and passenger) part of the 412A life support system or as designated by this publication.

Overwater Flight—Any flight taking off or landing overwater, exceeding power-off glide or auto-rotational distance from land.

Passenger (PAX)—Individual aboard aircraft for the purpose of transportation.

Primary Crewmember—Any person, rated or non-rated required on the aircraft to accomplish the flying mission.

Routine Mission—Mission required to support day-to-day peacetime operations.

Serviceable Storage—LSE exceeding day-to-day mission requirements, but required for contingencies. Inspections will not exceed 12 months.

C-27 LIFE RAFT ACCESSORY KIT COMPONENTS TABLE

Table A2.1. C-27 LIFE RAFT ACCESSORY KIT COMPONENTS

Noun	Quantity
*Survival radio, PRC-112 (w/spare battery) (see note 1)	1 each
*Signal, smoke and illumination, MK-13 or MK-124	4 each
*Signal kit, personnel, distress, A/P 25S-5A	1 each
*Light, marker, distress, SDU-5/E	1 each
(w/IR filter and flash guard)	
*Compass, lensatic or magnetic	1 each
*Mirror, signal, type I or II	1 each
*Kit, first aid (NSN 6545-00-139-3671)	6 each
Whistle, police, plastic	1 each
Container, waterproof, w/matches	1 each
Knife, pocket	1 each
Stone, sharpening	1 each
Water, drinking, flexible package (FPDW)	60 ounces
or	
Water, drinking, canned	
Desalinator, reverse osmosis, -35	1 each
Bag, water storage, 5-quart	5 each
Sponge, olive drab (NSN 7920-01-383-7936)	2 each
Bucket, bailing	1 each
Rations, survival, general purpose (GP)	5 each
Repair kit, life raft, w/pliers	1 each
AFPAM 36-2246, Aircrew Survival	1 each
Packet, sea marker dye	4 each
Kit, fishing	1 each
Ointment, sunburn, preventive	6 each
Cord, nylon, type I, 30-ft length	1 each
Pump, life raft (w/adapter installed)	1 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.).

NOTE: PRC-112 survival radio will be used because radio frequency 121.5 (guard channel) is required for the C-27 at its operating location.

KC-10 AUXILIARY SURVIVAL KIT (ASK) COMPONENTS TABLE

Table A3.1. KC-10 AUXILIARY SURVIVAL KIT (ASK) COMPONENTS

Noun	Quantity
*Survival radio, PRC-series (w/spare battery)	1 each
*Signal, smoke and illumination, MK-13 or MK-124	2 each
*Signal kit, personnel, distress, A/P 25S-5A	1 each
*Light, marker, distress, SDU-5/E or equivalent	1 each
(w/IR filter and flash guard)	
*Compass, lensatic or magnetic	1 each
*Mirror, signal, type I or II	1 each
*Kit, first aid (NSN 6545-00-139-3671)	3 each
Survival kit (7-person life raft accessory container)	1 each
Whistle, police, plastic	1 each
Container, waterproof, w/matches	1 each
Knife, pocket	1 each
Stone, sharpening	1 each
Water, drinking, flexible package (FPDW)	72 ounces
or	or
Water, drinking, canned	60 ounces
Desalinator, reverse osmosis, -35	1 each
Bag, water storage, 5-quart	1 each
Sponge, olive drab (NSN 7920-01-383-7936)	1 each
Bucket, bailing	1 each
Rations, survival, type ST	3 each
Repair kit, life raft, w/pliers	1 each
AFPAM 36-2246, Aircrew Survival	1 each
Packet, sea marker dye	1 each
Kit, fishing	1 each
Ointment, sunburn, preventive	7 each
Blanket, combat casualty (NSN 7210-00-935-6665)	3 each
Cord, nylon, type I, 30-ft length	2 each
	7 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.).

LIVE-ABOARD KIT (LAK) COMPONENTS TABLE

Table A4.1. LIVE-ABOARD KIT (LAK) COMPONENTS

Noun	Quantity
*Bag, sleeping (see note 1)	6 each
Repellent, insect	6 each
Ointment, sunburn, preventive	6 each
(Pre-sun 15 may be used)	
Hat, sun (large or X-large)	6 each
Cup, canteen	6 each
Stand, canteen	6 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.).

NOTE: Modular sleeping bag system (NSN 8465-01-395-1154) or equivalent. Units may substitute 6 each extreme cold weather sleeping bags (NSN 8465-01-033-8057) or 6 each sleeping bags, outer (Arctic) and 6 each sleeping bags, inner (Mountain) for the modular sleeping bag system. MC-1 sleeping bags are not authorized for use in LAKs.

MINIMUM SURVIVAL KIT (MSK) COMPONENTS TABLE

Table A5.1. MINIMUM SURVIVAL KIT (MSK) COMPONENTS

Noun	Quantity
*Survival radio, PRC-series (w/spare battery)	1 each
*Signal, smoke and illumination, MK-13 or MK-124	3 each
*Signal kit, personnel distress, A/P 25S-5A	1 each
*Light, marker, distress, SDU-5/E or equivalent	1 each
(w/IR filter and flash guard)	
*Compass, lensatic or magnetic	1 each
*Mirror, signal, type I or II	1 each
*Kit, first aid (NSN 6545-00-139-3671)	1 each
Whistle, police, plastic	1 each
Container, waterproof, w/matches	2 each
Knife, pocket	1 each
Stone, sharpening	1 each
Water, drinking, flexible package (FPDW)	24 ounces
Bag, water storage, 5-quart.	2 each
AFPAM 36-2246, Aircrew Survival	1 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.).

NOTE: When the minimum survival kit is carried on commercial airlines, remove the following items IAW T.O. 00-20-1: Signal, smoke and illumination, MK-13 or MK-124; Signal kit, personnel distress, A/P 25S-5A; container, waterproof, with matches; and knife, pocket.

T-9AF/LRU-14-SERIES LIFE RAFT ACCESSORY KIT COMPONENTS TABLE

Table A6.1. T-9AF/LRU-14-SERIES LIFE RAFT ACCESSORY KIT COMPONENTS

*Survival Radio, PRC-series (w/spare battery)	1 each
, 1	1 Cacii
*Signal, smoke and illumination, MK-13 or MK-124	4 each
*Signal Kit, personnel distress, A/P 25S-5A	1 each
*Light, marker, distress, SDU-5/E or equivalent	1 each
(w/IR filter and flash guard)	
*Compass, lensatic or magnetic	1 each
*Mirror, signal, type I or II	1 each
*Kit, first aid (NSN 6545-00-139-3671)	3 each
Whistle, police, plastic	1 each
Container, waterproof, w/matches	1 each
Knife, pocket	1 each
Water, drinking, flexible package (FPDW)	56 ounces
or	or
Water, drinking, canned	50 ounces
Desalinator, reverse osmosis, -06	1 each
Bag, water storage, 5-quart	3 each
Sponge, olive drab (NSN 7920-01-383-7936)	1 each
Bucket, bailing	1 each
Rations, survival, general purpose (GP)	3 each
or	or
survival type (ST)	3 each
Repair kit, life raft, w/pliers	1 each
AFPAM 36-2246, Aircrew Survival	1 each
Packet, sea marker dye	1 each
Kit, fishing	1 each
Ointment, sunburn, preventive	3 each
Blanket, combat casualty (NSN 7210-00-935-6665)	3 each
Cord, nylon, type I, 30-ft length	1 each
Stone, sharpening	1 each
6' x 6' plastic sheet	1 each
Tubing, latex, rubber, 6' length	1 each
Light, safety, cylume light stick	3 each

Noun	Quantity
Pump, life raft (commercial - E.A.M.)	1 each
Canopy (commercial - E.A.M.)	1 each
Mast, canopy (commercial - E.A.M.)	1 each
Rods, canopy (commercial - E.A.M.)	5 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.).

SURVIVAL VEST COMPONENTS TABLE

Table A7.1. SURVIVAL VEST COMPONENTS

Noun	Quantity
*Survival radio, CSEL or PRC-series (w/spare battery)	1 each
(see note 1)	
*Signal, smoke and illumination, MK-13 or MK-124	2 each
*Signal kit, personnel distress, A/P 25S-5A	1 each
*Light, marker, distress, SDU-5/E or equivalent,	1 each
(w/IR filter and flash guard)	
*Compass, lensatic or magnetic	1 each
*Mirror, signal, type I or II	1 each
*Kit, first aid (NSN 6545-01-120-2632)	1 each
Tourniquet	1 each
Whistle, police, plastic	1 each
Container, waterproof, w/matches	1 each
Knife, pocket	1 each
Water, drinking, flexible package (FPDW)	12 ounces
AFPAM 36-2246, Aircrew Survival	1 each
Hat, camouflage (large or extra-large)	1 each
Ointment, sunburn, preventive	1 each
Repellent, insect	1 each
Stick, camouflage	1 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.). Secure components to the vest IAW T.O. 14S1-3-51.

NOTE:

- 1. Combat Survivor Evader Locator (CSEL) radios will not be placed in equipment that will be permanently prepositioned aboard aircraft. Pockets on the survival vest may be relocated to ensure LSE integration.
- 2. When the survival vest is carried on commercial airlines, remove the following items IAW T.O. 00-20-1: Signal, smoke and illumination, MK-13 or MK-124; Signal kit, personnel distress, A/P 25S-5A; container, waterproof, with matches; and knife, pocket.

ML-4 SURVIVAL KIT COMPONENTS TABLE

Table A8.1. ML-4 SURVIVAL KIT COMPONENTS

Noun	Quantity
*Life raft, one person	1 each
*Repair plug, life raft (w/pliers, 1 each)	2 each
Water, drinking, flexible package (FPDW)	12 ounces
Blanket, combat casualty (NSN 7210-00-935-6665)	1 each
Mittens, set, type N4B	1 pair
Bag, water storage, 3-pint	1 each
Sponge, olive drab (NSN 7920-01-383-7936)	1 each
Hood, winter, wool	1 each
Socks, wool (size 12 minimum)	1 pair
*Packet, sea marker dye	1 each
Desalinator, reverse osmosis, -06	1 each

^{* -} Minimum mandatory equipment (refer to paragraph 7.). Secure components to the kit container IAW T.O. 14S1-3-51.

PROTECTIVE CLOTHING KIT (PCK) COMPONENTS TABLE

Table A9.1. PROTECTIVE CLOTHING KIT (PCK) COMPONENTS

Noun	National Stock Number	Quantity
Apron, clear vinyl	8415-00-715-0450	2 each
Gloves, rubber	8415-00-266-8675	2 pair
Gloves, aramid	8415-00-092-3910	1 pair
Shears, metal cutting	5110-00-092-3910	1 each
Vermiculite	5640-00-801-4176	5 pounds
Bags, plastic	8105-00-848-9631	3 each
Tape, masking, 1"	7510-00-266-6712	1 roll
Dustpan, rubber	7290-00-616-0109	1 each
Broom, whisk, 10"	7920-00-240-6350	1 each
Goggles, MIL-G-635 (see note 1)		(See MDS configuration tables for specific quantities.)

NOTES:

- 1. Not applicable to KC-10 and KC-135 aircraft.
- 2. Neutralizers for corrosive agents are not part of this kit.

IC 2003-1 TO AFI 11-302, VOLUME 1

MAINTENANCE AND CONFIGURATION REQUIREMENTS FOR AIRCREW AND AIR-CRAFT-INSTALLED LIFE SUPPORT EQUIPMENT (LSE)

30 SEPTEMBER 2003

SUMMARY OF REVISIONS

This change converts AFI 11-302, Volume 1 to AFI 11-301, Volume 2, re-titles the publication, and transfers the OPR from HQ USAF/XOOP to HQ USAF/XOOT. It rescinds paragraph 3.10.1. through 3.10.6, and provides improved policy for equipping aeromedical evacuation (AE) crewmembers (AECM) during deployment operations. It establishes a new basis of issue (BOI) for AE crewmembers (Table 11.), joins AE LSE with AE kits (UTC FFQDM) (paragraph 3.10.1.), identifies units to maintain AECM support kits (paragraph 3.10.2.), establishes Civil Reserve Air Fleet (CRAF) support kits (paragraph 3.10.4.), and identifies medical logistics contact information (paragraph 3.10.5. and Table 13.). This change also deletes the requirement for MB-1 casualty life preserver units to be prepositioned aboard aircraft to accommodate patients, C-141 units to maintain 250 passenger (PAX) masks, and C-130 units to maintain 5 passenger oxygen kits (POK) for AE kits. See the last attachment of the publication, IC 2003-1, for the complete IC. A star (H) indicates revision from the previous edition.

OPR: HQ USAF/XOOT (CMSgt Richard T. Robichaud)

Supercedes: AFI 11-302, Vol 1, 1 October 1999

Certified By: HQ USAF/XOO (Brig Gen Teresa M. Peterson)

- 3.10.1. ALS units, when supporting AE missions and aircrew, will build and maintain the equipment listed in **Table 11**. The equipment will be placed in kits assigned to, and deployed with, an AE in-flight kit (UTC FFQDM). Each ALS unit supporting an AE squadron will maintain a minimum of 2 AE ALS kits (**Table 11**.) for WRM. Exception: PACAF and USAFE ALS squadrons supporting AE operations will build and maintain eight (8) kits. Individual MAJCOMs will direct what units will maintain for local training and operational missions.
- 3.10.2. Travis, McGuire and Charleston AFBs will maintain the number of AECM support kits listed in **Table 12.** Seventy five percent (75%) of the total number of AECM support kits at each unit will be maintained ready at all times. If the AECM support kit capability goes below the 75% level, the unit will immediately notify HQ AMC/DOT in writing. The notification must include a detailed analysis of the problem and a projected get-well date.
- 3.10.3. Once built, MAJCOMs may authorize ALS sections maintaining AECM support kits to seal and place the kits in serviceable storage inspection status and inspect on an annual basis if time-change items' expiration dates permit. Upon notification of the need to deploy the AECM support kits, the ALS section will inspect the kit and place each item on a normal inspection cycle and deliver the kits to the designated organization within 24 hours.

Table 11. AECM SUPPORT KIT EQUIPMENT

AE EQUIPMENT	AECM SUPPORT KIT EQUIPMENT QTY
Mask, 358-series w/goggles	7
Notes 1, 2	
Survival Vest	7
Note 3	
Body Armor	7
Note 3	
Life Pres, LPU-10/P	7
Note 4	
Suit, Anti-Exposure, CWU-16/P	7
Note 4, 5	

- 1. Cabin/Cargo Area Aircrews will use the EPOS already prepositioned on the aircraft for emergency oxygen requirements for preplanned flights up to flight level 350 (FL350). For preplanned flights above FL350, all AE aircrew must have a quick-don mask with goggles attached (paragraph **3.11.1.**) to a walk-around bottle available for use.
- 2. Medical crew director (MCD) and charge medical technician (CMT) must have communication capability in their quick-don mask.
- 3. Survival vests provide crewmembers the necessary survival items while waiting for rescue or return to duty. The Air AceTM/Ace AdvantageTM [Air AdvantageTM] (paragraph **4.**) is the primary integrated survival vest and aircrew body armor for AE Squadron personnel. The SRU-21/P is also authorized (paragraph **4.3.**). AE Squadron personnel are authorized to request assigned equipment for unit training events.
- 4. Required for preplanned overwater flights only.
- 5. CWU-16/P or MAJCOM approved equivalent IAW T.O. 1-1-641.

Table 12. ALS AECM SUPPORT KIT HUB LOCATIONS

ALS AECM Support Kit Hub Locations	Authorized Number of Kits	75 Percent Level of Total Authorization
Travis AFB (60 OSS)	50	38
McGuire AFB (305 OSS)	50	38
Charleston AFB (437 OSS)	22	16

- 3.10.4. Civil Reserve Air Fleet (CRAF) Missions. All AE aircrews flying on CRAF aircraft are exempt from having to use the ALS equipment in **Table 11.**, except for the 358-series quick-don mask. These masks are required for protection from smoke and fumes and emergency decompressions. Travis and Charleston AFBs will maintain twelve (12) and thirteen (13) kits respectively, containing seven (7) each LPU-6/P infant cot life preservers and eleven (11) each EPOS to support AE CRAF missions. These CRAF support kits will only be mobilized to support CRAF AE operations.
- 3.10.5. **Table 13.** lists contact information for each hub location's medical logistics area controlling the medical portion of the FFQDM kit. Each ALS section at AE hub locations will contact and establish a local notification and delivery plan of the ALS portion of the kits to the medical logistics office (paragraph **3.10.3.**). Once coordinated, forward the local plan to HQ AMC/DOTL and send an info copy to HQ USAF/XOOT. Include these plans in the next review or revision of the unit's operating instructions or local directives.

Table 13. MEDICAL LOGISTICS CONTACT INFORMATION

TRAVIS AFB	MCGUIRE AFB	CHARLESTON AFB
60 MDSS/SGSL	305 MDSS/SGSLW	437 MDSS/SGSL
101 Bodin Circle (Bldg 777)	3418 McGuire Road	204 W. Hill Blvd (Bldg 364)
Travis AFB CA 94535-1825	McGuire AFB NJ 08641	Charleston AFB SC 29404-5300
DSN 779-7973/3962	DSN: 650-4818/6454/9313	DSN 673-6529/6527/6761
COMM: (707) 423-XXXX	COMM: (609) 754-XXXX	COMM: (843) 963-XXXX
FM4427	FM4484	FM4418
POC Position: NCOIC WRM	POC Position: NCOIC WRM	POC Position: NCOIC WRM